



**APEC Symposium On Paperless Trading Capacity  
Building And Intellectual Property Protection  
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**Paper**

State of developing paperless trading in Japan 2007

## State of developing paperless trading in Japan 2007

Kazumi Hirai  
Director,  
Third Management Dept  
Japan Association for Simplification of  
International Trade Procedures

## Four Great Inventions of ancient China 中国四大发明

- The Compass 指南针
- Gunpowder 炸药
- Papermaking 纸生产
- Printing 印刷

「倫乃造意用樹膚麻頭及敝布魚網以為紙。元興元年奏上之。帝善其能」 「自是莫不從用焉。故天下成称蔡候」



蔡倫：  
Cai Lun

Paper is considered to be one of the Four Great Inventions of Ancient China, as the first standard papermaking process was developed in China during the early 2nd century. While the Han Dynasty Chinese court official Cai Lun is widely regarded to have first invented the modern method of papermaking from wood pulp in 105 AD, the discovery of specimens bearing written Chinese characters in 2006 at north-west China's Gansu province suggest that paper was in use by the ancient Chinese military more than 100 years before Cai in 8 BC.



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Korea and Japan thank China greatly for the royalty free IPR on the heritaget ICT Suite (paper , Chinese ink, and drawing bush) given by China for over than 1,600 years

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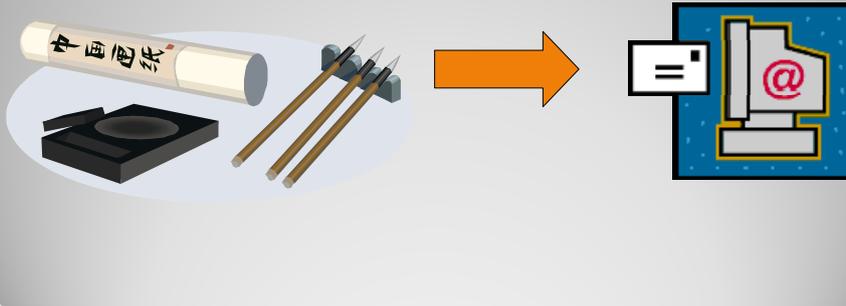
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# Great Paradigm Shift comes after 2000 years history of the heritage ICT

ICT of 105 A.D.

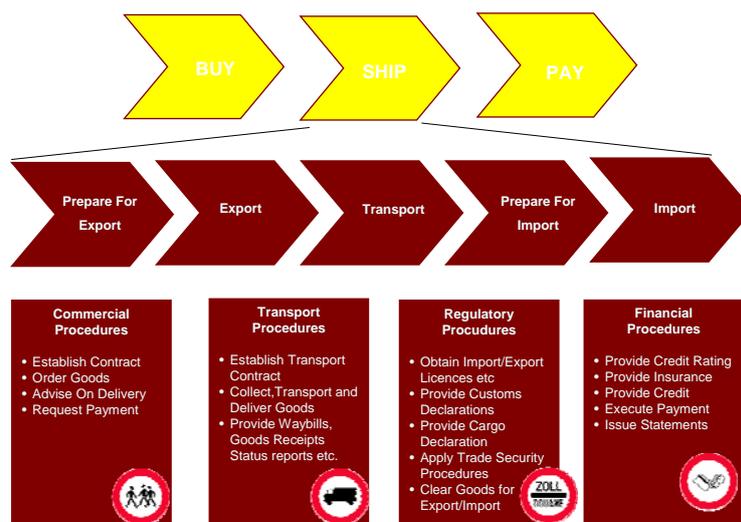
ICT of 21<sup>st</sup> Century



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## Field of International Trade Transactions waiting for streamlined innovation



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## Paperless Trading — Acceptance vs. Resistance

- “Paperless Trading” should be a slogan to represent a Business Process Reengineering (BPR) to maximize the throughput and to minimize the total cost of business transactions to be carried out by the parties concerned in International trade from the point of sales till the delivery of goods by appropriate implementation of ICT, which inevitably invite resistance on conservatism against such BPR
- Anyhow “paperless trading” should not be recognized as a purpose, but a leverage for BPR

## Paperless Trading State of Japan in 2007

- In respect of “Paperless Trading” Japan is no longer the leading player even in Asia.



In spite of the fact that Japan has competitive edge in ICT platform, such as nation wide broad band optical fiber network services, mobile phones services having more than 50 million users

## Why?

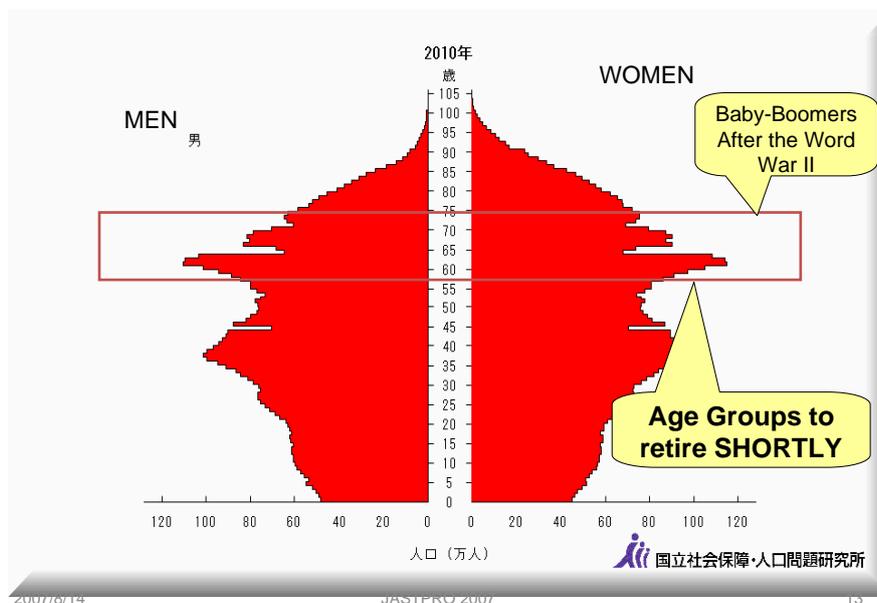
- Significant bottlenecks, which inhibit extensive implementation of the paperless trading (=EDI), are exist:
  - Digital Divide in age groups
  - Digital Divide in vertical trade
  - Digital Divide in geographical region

What about “Digital Divide” in age groups?

## What is happening in Japan ?

- Japanese peoples born in 1947, about 1.2 Million in population, will hit their retirement age of 60 in 2007 in their majority
- Those aged groups born from 1947 to 1949 are so-called “Baby-Boomers (団塊 [DANKAI]世代)” it is said their total population in Japan is about 6.8 Million → A very significant group of peoples both in volume and in their property.

## Age Group wise Population of Japan in 2010 (Simulation)



## What's the problem?

- The huge age group retiring will claim the Government considerable amount of payment for the retirement pension from the date of retirement, which will accelerate the fiscal difficulty of the Government of Japan (The National Debit Now exceeding US\$6,000 Billion)

How the Government is trying to manage the significant demand of the pension under the severe financial stringency

- To revise the regulation to prolong the age to start paying the pension from 60 to 65
- **(For the compensation of the above legislation) They had revised the labor law to enforce companies / organizations to extend the age of retirement from 60 to 65 years of old**

Older generations who are not good at ICT having Insufficient knowledge about IPR, but fond of paper based business

Younger generations who are accustomed with ICT / IPR for paperless way of doing business

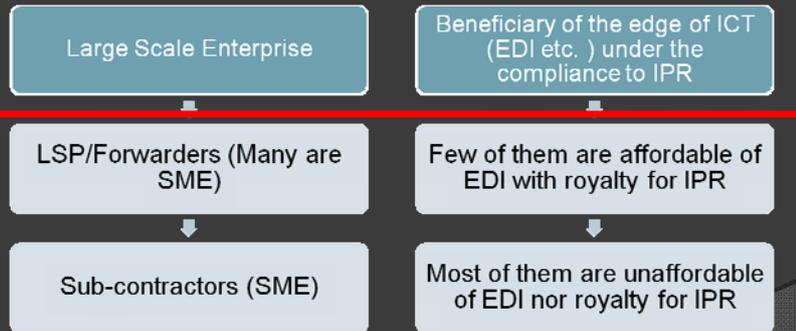
**Consequently , Digital Divide in age group continues till “DANKAI” group of peoples retire finally at/around age of 65**

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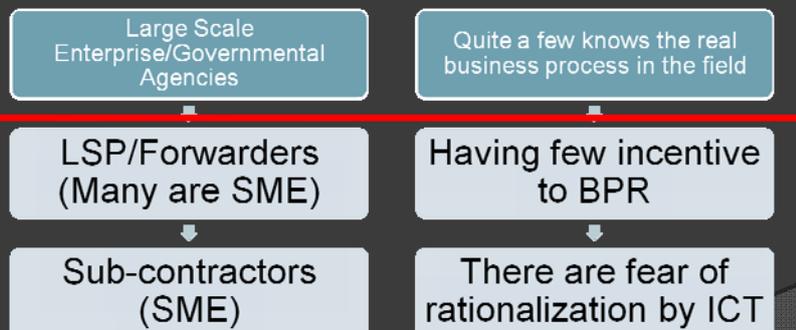
What about “Digital Divide” in vertical trades?

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In Japan, post sales transactions concerning cross border trade are carried out by many sub-contractors subject to market competitions each other to result in little financial resource to invest for ICT



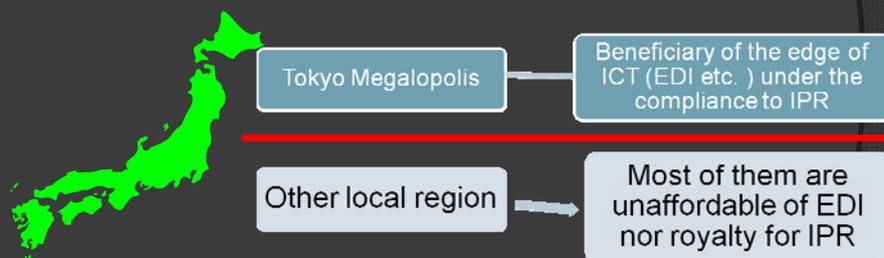
Policy makers are assigned among the officers of large scale enterprises / organizations who often do not know the fact on the business process in the field



## What about “Digital Divide” in documentary works ?

## Digital Divide in geographical region

Unbalance of wealth between Tokyo area, the megalopolis and other local region is the significant social / political issue of Japan in 2007



**Poverty itself does not  
induce the infringement of  
IPR**

**But bigger gap between the  
Rich and the Poor stimulate  
the infringement of IPR**

## How to solve those digital divides?

- There is no miracle drug for it
- The First step shall be to go to the real field to know the fact: what kind of bottlenecks and/or constraints exist in the field
- Among other things, research on the ROI for SME's scale of business to enable paperless trading, i.e. their affordable cost of ICT, including the cost to be compliant to IPR is essential, as it will show the demand for policies and services by the Government
- The common understanding on those bottlenecks and/or constraints will yield ideas to solve them

# Governmental Strategy of Japan

## → Priority Policy Program in 2007

### 1. Basic Policy Package

- Promotion of Efficiency, Productivity and Generation of innovative value
- Realization of healthy and reliable society
- Implementation of platforms for innovative development

### 2. Other Policies

- To seek structural reforms by ICT
- Development of common ICT Platform
- Propagation of Japanese ICT to the World

## Distinguishing points of Priority Policy Program in 2007 and its previous policies decided since the announcement of e-Japan in 2002

- Conservatism on paperless transactions
  - ✓ No legislative binding to electronic filing
- Waiver of royalty on the IPR for the software deployed for the e-Government services in public
  - In case of next generation of Customs clearance system (NACCS) the client software will be distributed free of charge

## Paperless Trading vs. IPR

- A policy making on how to share the cost of IPR in deploying / propagating Paperless Trading would be essential issue, especially for developing economies
- How to solve the Digital Divide between advanced countries and developing countries

## The UN/CEFACT IPR Policy #1 → Waiver Obligation of the IPR Policy

The UN/CEFACT IPR Policy is designed to promote the goal of enabling the implementation of UN/CEFACT Specifications without the burden of fees or restrictions. The Policy promotes this goal by requiring all Participants to waive their rights to enforce any of their intellectual property that would be necessary to implement or use a Specification developed in CEFACT.

The waiver is automatic if the Participant does not disclose the IPR, and is required as a condition of participating in the UN/CEFACT open development process.

## The UN/CEFACT IPR Policy #2 → DISCLOSURE OBLIGATION OF THE IPR POLICY

A Participant in a UN/CEFACT Forum Group can avoid the limited automatic waiver only by disclosing the content of its relevant IPR, and electing not to waive its rights to enforce such IPR, on or before one of the express "Disclosure Triggering Events" described in the Policy.

Triggering Event occurs, should the Authorized Individual fail to disclose a Participant's Essential IPR that they have knowledge of, the enforcement of such Essential IPR is automatically waived. In summary, should a Participant seek to preserve its rights to enforce its IPR against implementers of a UN/CEFACT Specification, the burden falls squarely on that Participant to disclose its IPR.

## UN/CEFACT Recommendation No. 33

Will the Single Window be the  
card to solve the Digital Divide  
both in a National economy and  
an International one ?

Yes, but how many windows do we need?



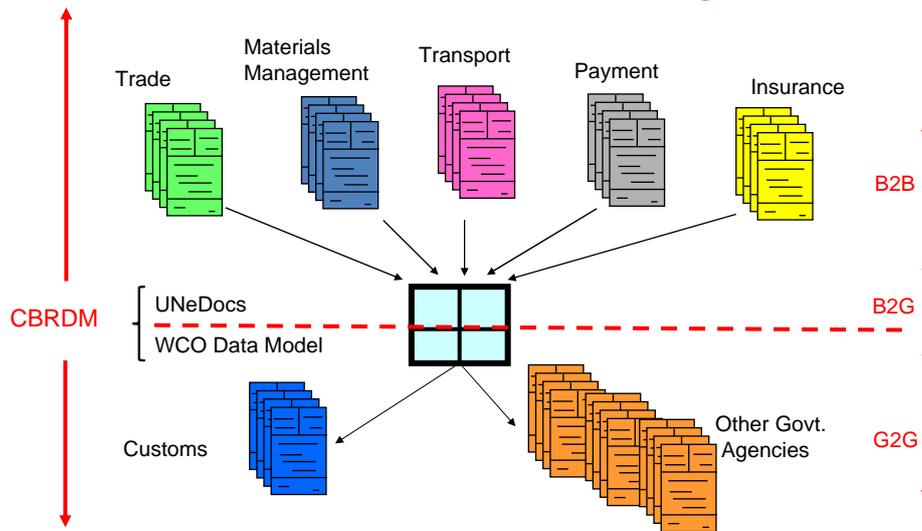
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One encouraging candidate for the solution

UN/CEFACT UNeDocs on the CBRDM for Single Windows



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「食廩實則知禮節、衣食足則知榮辱」  
管子

Poverty is an enemy to good  
compliance to the law.  
From hand to mouth will never  
make a worthy man.